



DMA8Plus Digital Media Adapter



Equip your sound system for digital cinema with the Dolby® DMA8Plus Digital Media Adapter.

The Dolby® DMA8Plus Digital Media Adapter is a practical, flexible solution for equipping your sound system for digital cinema, onscreen advertising, special events, and other program sources using digital audio. The adapter provides a comprehensive audio interface while its automation intelligence maintains a seamless fit with your cinema processor. The product design is elegant yet rugged and compact, occupying only one rack-unit space.

The DMA8Plus has four separate digital inputs and will accept up to eight channels of PCM digital audio as well as Dolby Digital and Dolby E bitstreams. Two-channel audio sources can be decoded as discrete L/R, Dolby Pro Logic®, or Dolby Pro Logic II. Analog audio outputs are calibrated to cinema processor reference levels to ensure a straightforward interface with your cinema's existing sound processor.

The DMA8Plus is easily set up via a laptop computer, and can be controlled by your cinema's automation system via standard GPIO automation, serial, or Ethernet commands. Individual digital sources can be selected rapidly using dedicated front-panel buttons. The unit also provides a switched "through" connection for external film audio decoders or six-channel analog sources such as the Dolby DA20. (In this way, both the DMA8Plus and the DA20 may share the cinema processor's six-channel input format.)

A separate adjustable global audio delay is assigned to each digital input to ensure that sound and picture are perfectly synchronized during digital cinema presentations. Different delays can be assigned to different inputs, giving flexibility with alternative content sources that often require different delays.

The front panel is designed to provide a wealth of feedback and usability for the user. Simple manual control is provided by the four digital input buttons and one film pass-through button. The valid indicators verify digital signal presence on each associated input. Other indicators reveal the bitstream format, the Decode mode, and eight-channel analog output signal presence. A USB port provides a reliable PC connection for the setup software application.

Dolby DMA8Plus Digital Media Adapter

Front Panel



PC Connection

USB port for setup operations and software upgrades

Input Selector Buttons

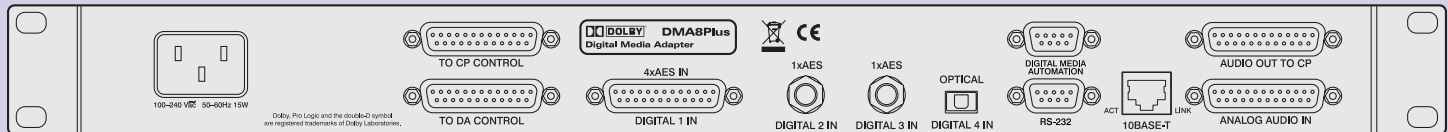
Digital 1 through 4 source buttons
Film source button

Indicators

Valid LEDs represent digital input presence for each digital input
Format LEDs indicate PCM, Dolby Digital, Dolby E, or Aux (future) processing

Decode mode LEDs indicate Dolby Pro Logic II, Pro Logic, or Discrete modes
Output activity LEDs indicate signal presence of each output channel

Rear Panel



Analog Audio Output

25-pin male D-connector, balanced for connecting to a Dolby cinema processor
L, C, R, Ls, Rs, Sw, 7, 8

Analog Audio Input

25-pin female D-connector for six-channel analog input from the output of a DA20 or other external processor, which is passed through when Film mode is selected or during power-off

CP, DA Control

25-pin male and female connectors for format sensing and control providing a customized interface for each Dolby cinema processor

RS-232 Serial Port

9-pin female D-connector for interfacing with software-based automation systems by way of ASCII command strings

10Base-T Ethernet Port

Ethernet port for interfacing with Dolby Digital Cinema systems and ASCII command strings

Digital Media Automation

9-pin female D-connector, ground switching relay contact closure for each front-panel button control; relay contacts provided for CP200 SW control (closure upon any digital format selection)

Digital 1 Input (4 × AES)

25-pin female D-connector provides four AES/EBU inputs of PCM audio (up to eight channels)
Input impedance: 110Ω

Digital 2 Input (1 × AES)

Male BNC connector, unbalanced, per AES-3id-1995/SMPTE 276M
Input impedance: 75Ω

Digital 3 Input (1 × AES)

Male BNC connector, unbalanced, per AES-3id-1995/SMPTE 276M
Input impedance: 75Ω

Digital 4 Input (Optical)

Optical connector for digital input

Construction

1-U rackmount chassis frame

Digital Audio Source Formats

PCM: 44.1, 48, and 96 kHz; 16-, 20-, 24-bit
Dolby Digital (AC-3)
Dolby E (23.98, 24, 25, 29.97, 30 fps)
Dolby Pro Logic II
Dolby Surround Pro Logic

Dolby Cinema Processor Compatibility

CP650, CP500, CP65, CP55, CP45, CP200, DA20

Global Audio Delay

Adjustable delay of all channels from 0–250 ms

Surround Channel Delay

Digital media program sources: adjustable from 0–150 ms

Power Requirements

100–240 VAC, 50–60 Hz

Dimensions and Weight

1-U rackmount chassis
44 x 483 x 342 mm (1.75 x 19 x 13.5 inches)
Net: 4.5 kg (10 lb)

Environmental Conditions

Operating: 0°C–40°C (32°F–104°F)
Nonoperating (storage): 0°C–85°C (32°F–185°F)
Humidity: 20%–80% relative, noncondensing

Regulatory Notices

North America: This unit complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules, and Industry Canada ICES-003 Class A requirements. It is UL Listed for the US and Canada.
Europe: This unit complies with the requirements of Low Voltage Directive 73/23/EEC and EMC Directive 89/336/EEC and carries the CE marking accordingly.
RoHS compliant.

Warranty

One-year limited, parts and labor; see disclaimer. Specifications subject to change without notice.

Disclaimer of Warranties

Equipment manufactured by Dolby Laboratories is warranted against defects in materials and workmanship for a period of one year from the date of purchase. There are no other express or implied warranties and no warranty of merchantability or fitness for a particular purpose, or of noninfringement of third-party rights (including, but not limited to, copyright and patent rights).

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